

REMARKS

Applicants have canceled withdrawn claims 42-53 as being directed to a distinct invention but have not canceled claims 6, 10, 15, 34, and 41 as they depend from pending independent claims.

Applicants hereby elect the species of Figure 2. Claims reading on this species include 1-5, 7-9, 11-33, and 35-41.

The newly added claims are supported by the Specification. For example, support for newly added claims 66-69 includes page 7, lines 10-14 of the Specification.

The Examiner rejects claims 1-5, 7, 14, and 16-18 under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 1 and 14 have been amended to overcome this rejection.

The Examiner rejects claims 1-5 and 16-18 under 35 U.S.C. §103(a) as being unpatentable over Masui et al. (U.S. 5,053,179) in view of EP 0280296 and JP 56058824; claim 7 over Masui et al. in view of EP 0280296 and JP 56058824 and further in view of Braun et al. (U.S. 4,790,306); claims 8, 11-14, and 19-21 over Masui et al. in view of Higashiguchi (U.S. 4,292,100); claim 9 over Masui et al. in view of Higashiguchi and further in view of Braun et al.; and claims 22-33 and 35-40 over JP 560855524 in view of Abrams (PCT WO 90/09289).

Applicant respectfully traverses the Examiner's rejections. It is respectfully submitted that none of the above references, individually or collectively, teach or suggest at least the following italicized language in each of the independent claims:

1. A method of decorating a molded article comprising:
providing a transfer having a flocking layer, a release sheet on one side of the flocking and a layer of a permanent adhesive on an opposite side of the flocking *to adhere the transfer to the molded article;*

securing the release sheet to an interior wall of a mold in which the article is made; and

molding the part such that the resin contacts the layer of permanent adhesive, wherein the temperature of the resin in the mold is less than a melting point of the permanent adhesive;

cooling the mold;

ejecting the part; and

removing the release sheet from the transfer.

8. A method of decorating a molded article comprising:

coating a release sheet with a release adhesive;

flocking flock into said release adhesive by embedding a first end of said flock into the release adhesive to result in at least one pattern of flock arranged to form a predetermined design adhered to said release sheet;

applying a permanent adhesive to an opposite side of the flocking;

affixing said release sheet to the interior surface of a mold; and

molding an article over said permanent adhesive in said mold; said permanent adhesive permanently bonding said flock to said article, wherein, under the thermal conditions experienced by the permanent adhesive during the molding step, the permanent adhesive does not liquefy and ooze out around the flock.

22. (Twice Amended) A method for producing a molded article, comprising:

providing a flocked structure, the flocked structure comprising a plurality of flock fibers adhered to a permanent adhesive;

positioning the flocked structure in a part of a mold;

introducing a molten resin, at a resin temperature, into the mold after closure of the mold while the flocked structure is positioned in the closed mold; and

after solidification of the resin, removing a molded article comprising the flocked structure and the solidified resin from the mold, wherein a melting temperature of the permanent adhesive is greater than the maximum temperature experienced by the permanent adhesive during the introducing step.

Masui et al.

Masui et al. is directed to a process for producing a multilayer molded article which includes supplying at least one piece of skin material having a desired shape and a resin melt between unclosed upper and lower molds and closing the molds to form a multilayer molded article including

the thermoplastic resin and the skin material. The skin material is lifted by a rod to a position at which the skin material contacts a cavity surface of the upper mold. The resin is then supplied between the upper and lower molds and the rod is returned to a determined position before the molding is complete. As noted by the Examiner, Masui et al. does not teach using a film having a flocking layer, a release layer, and a layer of binder on an opposite side of the flocking and removing a release sheet from a transfer. (Office Action at page 5)

EP 0280296

EP 0280296 is directed to a flocked product obtained by flocking the adhesive-coated surface of a nonwoven, woven, or knitted fabric. Molded articles may be made from the flocked product by putting the flocked product in a mold with the flock fibers contacting a wall of the mold. The fabric substrate is located on the lower ends of the flock to contact the melted or softened resin. The reference states that the adhesive is a "heat fusible resin which can be readily melted when heated and which can be dissolved or dispersed in water and/or solvent in order to form a solution or a dispersion." (Col. 4, lines 15-19.) Examples of such adhesives include heat fusible resins including polyacrylate resin, polyamide resin, polyolefin resin, ethylene-vinyl-acetate copolymer, and other various hot-melt type resins. (Col. 4, lines 19-23.)

Contrary to the Examiner's assertion of obviousness, EP0280296 *teaches away* not only from the use of an adhesive which does not melt under the temperatures experienced by the adhesive in the mold but also the use of a thermosetting adhesive. While EP0280296 apparently uses the fabric substrate to inhibit the passage of resin between the flock fibers during molding, the claimed

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Claimed
in 1291*

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invention uses an adhesive layer that does not, under the temperatures experienced during molding, liquefy and ooze.

JP 56058824

JP 56058824 is directed to a decorative member inserted into a molded article. The decorative member has a film sheet 2, tape layer 7 having adhesive on both sides of the tape to contact to a wall of the mold and to the film sheet 2, a decorative layer 3, an adhesive layer 4, and a layer 5 to engage a synthetic thermoplastic resin or a rubber. The English abstract of the reference fails to teach the use of flock to form the design or the composition or properties of the adhesive layer 4.

Braun et al.

Braun et al. is directed to a filtering device made by inserting into an injection mold porous, rigid or semi-rigid filtration element. An inhalation plenum of the mask can be formed at the same time by inserting into the flow channel of the mold a thin layer of a second resin which substantially does not melt at the pressure and temperature at which the first resin is injected.

PCT WO 02/07959

PCT WO 02/07959 is not prior art. The inventor of the PCT is Louis B. Abrams, the same inventor as the inventor of the present application. The PCT claims priority to another application filed July 24, 2000, only seven days before the filing date of the present application, namely July 31, 2000. The PCT published on January 31, 2002, after the filing date of the present application. Accordingly, the reference is not prior art under 35 U.S.C. §102.

Accordingly, the pending claims are allowable.

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The dependent claims provide further reasons for allowance. By way of example, claims 18 and 20 are directed to a thermosetting adhesive as the permanent adhesive. Contrary to the Examiner's assertion, Applicants respectfully submit that such an adhesive is not obvious for the present application. As noted, EP0280296 specifically teaches that the adhesive is a hot-melt adhesive that readily melts when heated.

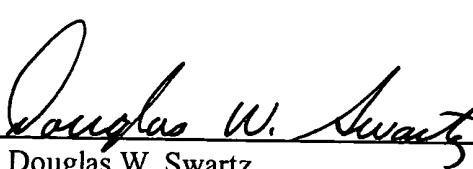
Applicant has added new claims 54-65. Contrary to the teachings of EP0280296, dependent claims 54-56 and 59 require the permanent adhesive to be free of a hot-melt adhesive. Dependent claims 66 to 69 require the flocked structure to be formed into a nonplanar, three-dimensional shape before molding. This is done to resist shear forces exerted on the structure during molding. Masui et al. does not teach or suggest this step but rather teaches that the skin material is planar in shape (Figures 3 -14).

Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

SHERIDAN ROSS P.C.

By:


Douglas W. Swartz
Registration No. 37,739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

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